

Page 1 November 04, 2009 9:21:52 AM Item ID: D2917-1 Accept Setup Start Revision ID: В Stop Item Name: Saddle LH **Start Date:** 11/9/2009 **Start Qty: 10.00 Cust Item ID: Required Date:** 11/13/2009 Req'd Qty: 10.00 **Customer:** Reference: Run Start Date: 09-11-04 Tooling: Process Plan: MF Approvals: Date: Stop Date: \_\_\_\_\_ SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Draw Draw Plan Accept Reject Reject Insp. Work Center ID Description Number **Run Hours** Rev. Code **Qty** Oty Number Stamp **Draw Nbr Revision Nbr** D2917 Rev B 100 HAAS CNC VERTICAL MACHINING #1 HAAS 1 Memo HAAS CNC vertical machine #1 Program batch number ☐ Machine Step No 1 as per Folio FA436 and visually inspect as per Dwg D2917 & attached Dimension Sheet ☐ Machine Step No 2 as per Folio FA436 and visually inspect as per Dwg D2917 & attached Dimension Sheet ☐ Machine Step No 3 as per Folio 110 CONVENTIONAL MILLING MACHINE Mill Conv 0.00 Memo Conventional Milling Machine Machine Keyway and inspect per Dwg D2917 & attached dimension sheet 120 QC2- Inspect parts off machine FAI/FAIB SP/and og/11/17 Memo Quality Control

Dart .	Aeros	pace	Ltd
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Dart Aerospace Ltd										
9	WORK ORDER CH	WORK ORDER CHANGES								
, 4	PROCEDURE CHANGE	By Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector					
<b>, , , , , ,</b>										
		PAR #: Fault Category:	WORK ORDER CHANGES  PROCEDURE CHANGE  By Date  PAR #: Fault Category: NCR: Yes No DO	WORK ORDER CHANGES  PROCEDURE CHANGE By Date Qty  PAR #: Fault Category: NCR: Yes No DQA:	WORK ORDER CHANGES  PROCEDURE CHANGE  By Date Qty Chief Eng / Prod Mgr					

NCR:			WORK ORDE	ER NON-CONFORMANO	CE (NCR)			
		Description of NC		Corrective Action Section B		Verification	A	
DATE	STEP	Section A	Initial   Action Description   Sign & Date		Section C	Approval Chief Eng	Approval QC Inspector	
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Page 2

November 04, 2009 9:21:53 AM

Item ID:

D2917-1

**Revision ID:** В

Saddle LH Item Name:

11/9/2009

**Start Oty: 10.00** 



Accept



Setup Start

Stop



**Start Date:** 

**Required Date: 11/13/2009** 

Req'd Qty: 10.00

**Cust Item ID: Customer:** 

Reference:

Approvals:

Process Plan:

Date:

Date: Tooling:

SPC (Y/N):

Date:

Date:

Run

Start



Stop

Sequence ID/ **Work Center ID** 

130

Quality Control

Operation Description

QC8- Inspect parts - second check

Memo

Set Up/ **Run Hours** 0.00

0.00

Number

Draw

Draw Rev.

Plan

Accept **Qty** Code

Reject **Qty** 

Reject Number Stamp

140

HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

0.00

09/11/19

150

Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

M112148

0.00

-> If od/1/20 (10) or

Memo

Memo

0.00

4:10 AM DOVEN TEMPERATURE: START TIME:

9 ! 40 JEINISH TIME:

W/O:			W	ORK ORDER CHAN	GES					
DATE	STEP	PRO	CEDURE CHA	NGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
	į			·						
Part No	•	PAR #:	Fault Cate	gory:	NCR	: Yes N	lo DQ/	<b>A:</b>	Date: _	
	R	esolution:	QA:	N/C Clo	sed:		Date: _			
NCR:		V	VORK ORD	ER NON-CONFORM	MANCE	(NCR)	l			
DATE	STEP	Description of NC Section A	Initial	Action Description	ection B	Sign &	- Verific Section		Approval Chief Eng	Approval QC Inspector
			Chief Eng	Chief Eng		Date				·
	<u>.</u>									

#### Work Order ID 53422

November 04, 2009, 9:21:53 AM

В



Page 3

Item ID:

D2917-1

Accept

Setup Start

Stop

Revision ID:

Item Name: Saddle LH

**Required Date: 11/13/2009** 

11/9/2009

**Start Oty: 10.00** 

Reg'd Otv: 10.00

**Cust Item ID:** 

**Customer:** 

Reference:

**Start Date:** 

Approvals:

Process Plan:

Date:

Date:

Tooling:

SPC (Y/N):

Date:

Date:

Run Start

Stop

Sequence ID/ Work Center ID

160

**Ouality Control** 

Operation Description

OC3- Inspect Part Finish

Set Up/

**Run Hours** 0.00

Draw Draw Number Rev.

Plan Code

Accept **Qty** 

Reject Reject **Qty** Number

Insp. Stamp

Memo

0.00

mo 09/1/1/20

XID

170

Packaging

Packaging

Identify as per dwg & Stock Location:

Memo

0.00

0.00

( 29/1/20 (10)

180

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

M.09-11-20

W/O:			W	ORK ORDER CHANG	ES										
DATE	STEP	PR	OCEDURE CH	ANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector					
		,	···												
		+ 1													
Part No	•	PAR #:	PAR #: Fault Category:						NCR: Yes No DQA: Date:						
	Re	solution:	on:	_ QA:	N/C Clo	sed:		Date: _							
NCR:				DER NON-CONFORMA											
DATE	STEP	Description of NC		on B		Verific	ication Approva		Approval						
DAIL	JILF	Section A	Initial Chief Eng	Action Description Chief Eng		Sign & Date	Section C		Chief Eng	QC Inspector					
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		- Charles						-							
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### **Picklist Print**

November 04, 2009 9:21:52 AM

Work Order ID: 53422

Parent Item:

D2917-1RevB

Parent Item Name: Saddle LH

Comments:



**Start Date:** 11/9/2009

**Required Date:** 11/13/2009

Page 1

**Start Qty: 10.00** 

Required Qty: 10.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date	Status
Item Name	Item ID	Purch	Item	Location	Location	Seq ID	Measure	Hand	Qty To Pick	Issued	Issued	
D6102-010RevD		Manufactured	No			100	Each	11.0000	10.0000			

Saddle Billet

Warehouse	Loc Oty	Loc Code	
<b>Location</b>			
Main Warehouse			
MAT	11		
51423	6		
52067	5		

Batch# B53579

and ogliliz

W/O:			WC	ORK ORDER CHANG	ES						
DATE	STEP	PRO	OCEDURE CHA	NGE	E	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
161	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \										
					1 1 Manual 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
Part No	•	PAR #:	Fault Cate	gory:	_ NCR:	Yes N	lo <b>DQ</b>	A:	Date:		
					_ QA: N/C Closed: Date:						
NCR:				ER NON-CONFORMA							
DATE	STEP	Description of NC		ion B		Verific	cation	Approval	Approval		
DAIL	SIEF	Section A	Initial Action Description Chief Eng Chief Eng			Sign & Date	Section C		Chief Eng	QC Inspector	
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						1.00					
			1.			<del></del>					
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DART AEROSPACE LTD	Work Order:	53422
Description: Saddle LH	Part Number:	D2917-1
. // //		
Inspection Dwg: D2917 Rev. At 15 C/W/		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2917 Rev. A1 and record below:

Dim Min  A 0.17  B 0.09  C 0.25  D 1.59  E 0.18  F 0.27  G 1.38  H 3.17  I 0.17  J 0.47  K 1.49  L 4.43  M 0.25  N 1.22  O 1.10  P 0.47  Q 0.43  R 0.49  S 1.74  T 7.99  U 3.49  V 0.17  W 1.99  X 0.76  Y 0.30  Z 0.61  AA 0.17  AB  AC		Max	0-/1-0-						
B 0.09 C 0.25 D 1.59 E 0.18 F 0.27 G 1.38 H 3.17 I 0.17 J 0.47 K 1.49 L 4.43 M 0.25 N 1.22 O 1.10 P 0.47 Q 0.43 R 0.49 S 1.74 T 7.99 U 3.49 V 0.17 W 1.99 X 0.76 Y 0.30 Z 0.61 AA 0.17 AB	175	IVIGA	Go/No Go Gauge	1	2	3	4	Ву	Date
C 0.25 D 1.59 E 0.18 F 0.27 G 1.38 H 3.17 I 0.17 J 0.47 K 1.49 L 4.43 M 0.25 N 1.22 O 1.10 P 0.47 Q 0.43 R 0.49 S 1.74 T 7.99 U 3.49 V 0.17 W 1.99 X 0.76 Y 0.30 Z 0.61 AA 0.17 AB		0.205		.189	139	.138	.137		
D 1.599 E 0.18 F 0.27 G 1.38 H 3.17 I 0.17 J 0.47 K 1.49 L 4.43 M 0.25 N 1.22 O 1.10 P 0.47 Q 0.43 R 0.49 S 1.74 T 7.99 U 3.49 V 0.17 W 1.99 X 0.76 Y 0.30 Z 0.61 AA 0.17 AB	090	0.110		.090	.097	100_	.090		
E 0.18 F 0.27 G 1.38 H 3.17 I 0.17 J 0.47 K 1.49 L 4.43 M 0.25 N 1.22 O 1.10 P 0.47 Q 0.43 R 0.49 S 1.74 T 7.99 U 3.49 V 0.17 W 1.99 X 0.76 Y 0.30 Z 0.61 AA 0.17 AB	250	0.270		. 265	267	. 266	.265		
F 0.27 G 1.38 H 3.17 I 0.17 J 0.47 K 1.49 L 4.43 M 0.25 N 1.22 O 1.10 P 0.47 Q 0.43 R 0.49 S 1.74 T 7.99 U 3.49 V 0.17 W 1.99 X 0.76 Y 0.30 Z 0.61 AA 0.17 AB	599	1.619		1.615	1.616	1.614	1.614		
G 1.38 H 3.17 I 0.17 J 0.47 K 1.49 L 4.43 M 0.25 N 1.22 O 1.10 P 0.47 Q 0.43 R 0.49 S 1.74 T 7.99 U 3.49 V 0.17 W 1.99 X 0.76 Y 0.30 Z 0.61 AA 0.17 AB	180	0.220		.130	.180	.130	.180		
H 3.17( I 0.17; J 0.47( K 1.49) L 4.43( M 0.25 N 1.22( O 1.10; P 0.47( Q 0.43; R 0.49( S 1.74; T 7.99( U 3.49; V 0.17; W 1.99( X 0.76( Y 0.30; Z 0.61; AA 0.17; AB	277	0.297		.288	.234	. ૩૩૬	.286		
I 0.173 J 0.477 K 1.496 L 4.436 M 0.25 N 1.225 O 1.103 P 0.477 Q 0.436 R 0.496 S 1.745 T 7.996 U 3.496 V 0.175 W 1.996 X 0.766 Y 0.307 Z 0.615 AA 0.177 AB	385	1.400		1.392	1.394	1.392	1.392		
J 0.470 K 1.490 L 4.430 M 0.25 N 1.220 O 1.100 P 0.470 Q 0.430 R 0.490 S 1.740 T 7.990 U 3.490 V 0.170 W 1.990 X 0.760 Y 0.300 Z 0.610 AA 0.170 AB	170	3.230		3,209	3.210	3.206	3.209		
K 1.496 L 4.436 M 0.255 N 1.226 O 1.100 P 0.476 Q 0.436 R 0.496 S 1.746 T 7.996 U 3.496 V 0.176 W 1.996 X 0.766 Y 0.307 Z 0.616 AA 0.177 AB		0.217		133	. 133	.185	.181		
L 4.430 M 0.25 N 1.223 O 1.103 P 0.470 Q 0.433 R 0.490 S 1.744 T 7.990 U 3.493 V 0.173 W 1.990 X 0.760 Y 0.303 Z 0.613 AA 0.173 AB		0.530		.500	,500	.500	.500		
M 0.25 N 1.229 O 1.100 P 0.470 Q 0.430 R 0.490 S 1.740 T 7.990 U 3.490 V 0.170 W 1.990 X 0.760 Y 0.300 Z 0.610 AA 0.170 AB	498	1.508		1.505	1.505	1,505	1.505		
N 1.229 O 1.100 P 0.470 Q 0.430 R 0.490 S 1.740 T 7.990 U 3.490 V 0.170 W 1.990 X 0.760 Y 0.300 Z 0.610 AA 0.170 AB	436	4.446		4.441	4.441	4.441	4.44/		
O 1.103 P 0.479 Q 0.433 R 0.499 S 1.744 T 7.999 U 3.499 V 0.175 W 1.996 X 0.766 Y 0.303 Z 0.618 AA 0.175 AB	257	0.262	<del>`DT868</del> 3	.360	. 260	.258	. २८४		
P 0.470 Q 0.433 R 0.490 S 1.745 T 7.990 U 3.495 V 0.175 W 1.990 X 0.760 Y 0.300 Z 0.615 AA 0.175 AB	225	1.235		1.230	1.230	1.230	1,230		
Q 0.436 R 0.496 S 1.745 T 7.996 U 3.496 V 0.175 W 1.996 X 0.766 Y 0.307 Z 0.615 AA 0.177 AB	103	1.113		1.107	1.107	1.107	1.107		
R 0.490 S 1.740 T 7.990 U 3.490 V 0.170 W 1.990 X 0.760 Y 0.300 Z 0.610 AA 0.170 AB	470	0.530		.500	·500	.500	500		
S 1.749 T 7.990 U 3.499 V 0.179 W 1.990 X 0.760 Y 0.300 Z 0.619 AA 0.177 AB	438	0.443	~ <del>DT868</del> 2	442	.443	.443	.443		
S 1.749 T 7.990 U 3.499 V 0.179 W 1.990 X 0.760 Y 0.300 Z 0.619 AA 0.177 AB	490	0.510		.498	.505	.510	506		
U 3.499 V 0.179 W 1.999 X 0.766 Y 0.307 Z 0.619 AA 0.177 AB	745	1.755		1.750	1.750	1.750	1.750		
U 3.499 V 0.179 W 1.999 X 0.766 Y 0.307 Z 0.619 AA 0.177 AB	990	8.010		3.000	3.000	8.000	8.000		
V 0.175 W 1.996 X 0.766 Y 0.307 Z 0.615 AA 0.177 AB		3.505		3.500	3,500	3.500	3,500		
X 0.766 Y 0.300 Z 0.615 AA 0.177 AB	175	0.205		.200	.195	195	.197		
Y 0.307 Z 0.619 AA 0.177 AB		2.010		2.007	2.009	2.008	2.006		
Z 0.619 AA 0.177 AB	760	0.765		.763	760	.760	.760		,
AA 0.17	307	0.312		.311	312	.312	-3//		
AA 0.17	615	0.635		-624	.623	.624	.623		
AB	177	0.197		· <i>1</i> রণ	.188	.738	.189		
AC									
AD									
AE									
AF									
AG									
AH									

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Measured by: \( \int \mathcal{D} \). \( \varphi \)	Audited by
Date: 09/11/15	Date: 09-11-19

Rev	Date	Change	Revised by	Approved
Α	04.08.12	New Issue	KJ/JLM	21
В	04.09.20	Added DT8683 & DT8682	KJ/JLM A	

W/O:			WC	RK ORDER CHANG	iES				
DATE STEP PF			OCEDURE CHAI	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
Part No		PAR #:	Fault Cate	gory:	NCR: Yes	No <b>DQ</b>	\:	Date:	
	Res	olution:	Disposition	n:	_ QA: N/C CI	osed:	· · · · · · · · · · · · · · · · · · ·	Date: _	
NCR:			WORK ORD	R NON-CONFORM	ANCE (NCF	R)			
DATE	STEP	Description of NC	Corrective Action Section B			Verific	ation	n Approval	Approval
DAIL	JIL!	Section A	Initial Chief Eng	Action Description  Chief Eng	Sign 8 Date	Section	on C	Chief Eng	QC Inspector
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DART AEROSPACE LTD	Work Order:	53422
Description: Saddle LH	Part Number:	D2917-1
Inspection Dwg: D2917 Rev. AG		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2917 Rev. A1 and record below:

				Re	corded Act	ual Dimensi	ons		
Dim	Min	Max	Go/No Go Gauge	54	6.2	73	8N	Ву	Date
Α	0.175	0.205		./37	.133	.139	-139		
В	0.090	0.110		.100	100	-100	1095		
С	0.250	0.270		. 264	.265	. 265	.264		
D	1.599	1.619		1.615	1.615	1.65	1.614		
E	0.180	0.220		.130	.180 .289	.180	-18D		
F	0.277	0.297		.237	.289	1.236	.285		
G	1.385	1.400		1.392	1.390_	1.391	1.390		
H	3.170	3.230		2.210	3.210	3.007	3.210		
, i	0.175	0.217		,184	.184	.130	.177		
J	0.470	0.530		,500	500	.500	.500		
K	1.498	1.508		1.503	1.503	1.503	1.503		
L	4.436	4.446		4.440	4.440	4.440	4.440		
M	0.257	0.262	,DT8683	.258	.259	.259	.259		
Ň	1.225	1.235		1.230	1.230	1.230	1.230		
0	1.103	1.113		1,107	1.107	1.107	1.107		
P	0.470	0.530		.500	1STO	.500	.500		
Q	0.438	0.443	DT8682	.443	.443	. 443	.441		
R	0.490	0.510		.500	504	.500	.500		
S	1.745	1.755		1.750	1.750	1.750	1.750		
T	7.990	8.010		8.000	8.000	8.000	8.000		
U	3.495	3.505		3.500	3.506	3.500	3.500		
V	0.175	0.205	·	.195	.194	.185	.193		
W	1.990	2.010		2.006	2.005	2.004	2.005		
Х	0.760	0.765		.760	764	764	·764		
Υ	0.307	0.312		.311	.310	.310	.310		
Z	0.615	0.635		.623	.623	.623	.622		
AA	0.177	0.197		.139	.185	187	. 185		
AB									
AC									
AD									
ΑE									
AF									
AG									
AH									·
	Acc	ept/Reje	ct						

Measured by: &	Audited by
Date: 59/11/16	Date: 69.11.19

Rev	Date	Change	Revised by	Approved
Α	04.08.12	New Issue	KJ/JLM	1
В	04.09.20	Added DT8683 & DT8682	KJ/JLM	

	•								
W/O:		-	W	ORK ORDER CHANGE	ES			***	
DATE	STEP	PRO	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
								•	
				•					
Part No	:	PAR #:	Fault Cate	egory:	NCR: Yes	No DQ	4:	 Date:	
		esolution:							
NCR:			WORK ORD	ER NON-CONFORMA	NCE (NCF	R)			
DATE	STEP	Description of NC		Corrective Action Section		Verific	ation	Approval	Approval
		Section A	Initial Chief Eng	Action Description Chief Eng	Sign 8 Date	Secti	on C	Chief Eng	QC Inspector
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			}						

DART AEROSPACE LTD	Work Order:	53402
Description: Saddle LH	Part Number:	D2917-1
Inspection Dwg: D2917 Rev. At 19		Page 1 of 1

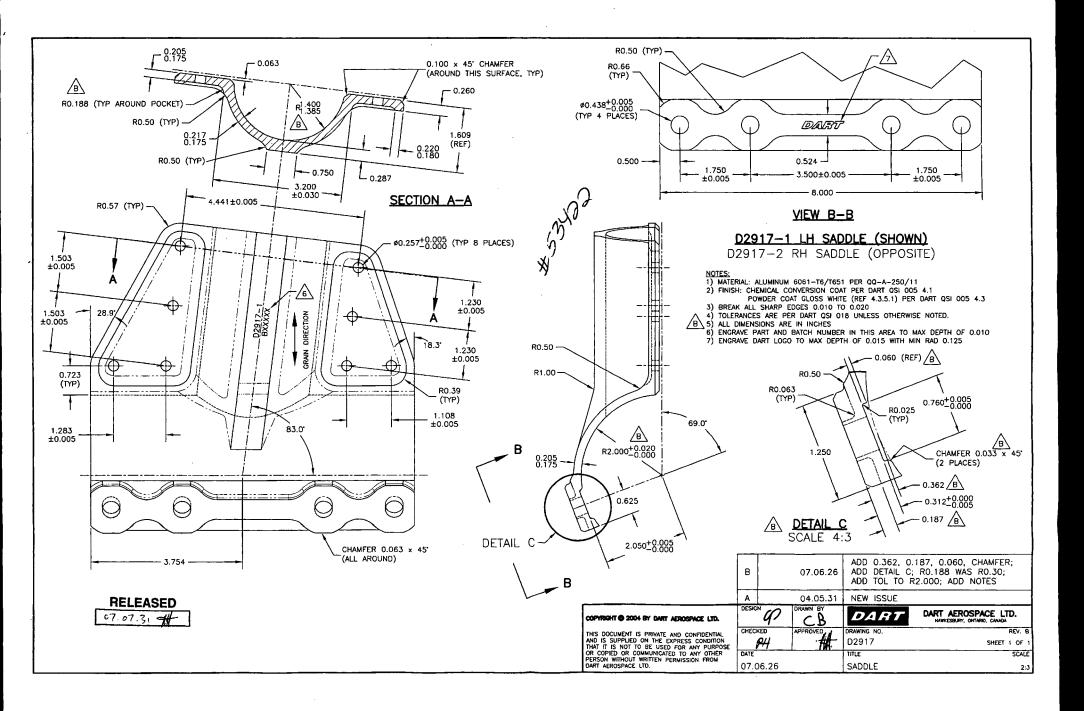
Inspect dimensions highlighted on inspection sheet drawing D2917 Rev. A1 and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	9 ×	10 %	3	4	Ву	Date
Α	0.175	0.205		.134	188				
В	0.090	0.110		D40	090				
С	0.250	0.270		.265	.264				
D	1.599	1.619		1.615	1.6/3				
Ē	0.180	0.220		-180	.180				
F	0.277	0.297		1.386	.180				
G	1.385	1.400		1.386	11.387				
Н	3.170	3.230		3.210	13.210				
	0.175	0.217		.175	・バファ				
J	0.470	0.530	·	.500	-506				
K	1.498	1.508		1.503	1.536				·
L	4.436	4.446		4,440	4.440				
M	0.257	0.262	-DT8683	,260	,210h				
N	1.225	1.235		1.230	1.230				
0	1.103	1.113		1.107	1.105				
Р	0.470	0.530		,500	- 500				÷ 1
Q	0.438	0.443	_DT8682	. 441	.441				
R	0.490	0.510		-503	,506				
S	1.745	1.755		1-750	1.750				
Т	7.990	8.010		8.000	8.000				
U	3.495	3.505		3,500	3.500				
V	0.175	0.205		.193	-191				
W	1.990	2.010		2.000	2.001				
Х	0.760	0.765		763	763				
Υ	0.307	0.312		.3/6	.310				
Z	0.615	0.635		622	1.622				
AA	0.177	0.197		. 188	.188				
AB									·
AC									
AD				<u></u>					
AE					ļ				
AF_									
AG									
AH								1	
	Acc	ept/Reje	ct						

Measured by: SP, CWA	Audited by
Date: 09/11/16	Date: 69.11-17
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	Rev	Date	Change	Revised by	Approved
-	Α	04.08.12	New Issue	KJ/JLM ,	
	В	04.09.20	Added DT8683 & DT8682	KJ/JLM	

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W/O:			W	ORK ORDER CHANG	SES				
DATE	STEP	PROCEDURE CHANGE			Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
						2			
Part No:		PAR #:	Fault Cate	egory:	NCR: Yes	No DQA:	DQA: Date:		
	Res	solution:	Disposition	on:	QA: N/C CI	osed:	Date:		
NCR:			WORK ORD	ER NON-CONFORM	ANCE (NCR	3)			
DATE	STEP	Description of NC Section A	Corrective Action Section			Verification	Approval	Approval	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector	
						}			
					:				



<b>Dart Aerospace</b>
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W/O:		WORK ORDER CHANGES										
DATE STEP		PROCEDURE CHANGE				Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
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	1						•					
		PAR #:	_ Fault Cat									
		olution: Disposition:								Date:		
NCR:		W	ORK ORI	DER NON-CONFORMA	NCE	(NCR)						
DATE	STEP	Description of NC Section A	Initial Chief Eng	Corrective Action Section Action Description Chief Eng	on B	Sign & Date	Verific Section		Approval Chief Eng	Approval QC Inspector		
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